

REMARKS

Status of the Claims

Claims 1-25 are pending in this application.

Claims 1-18 and 20-25 are rejected.

Claims 19 are objected to.

Claim 20 has been amended.

Claim 26 is new. Support for the amendment and new claim can be found throughout the specifications, claims, and drawings, as originally filed.

Rejection of Claims 1, 2, 7, 9, 10, 12-16 and 20-22 Under 35 U.S.C. § 102(b)

Claims 1, 2, 7, 9, 10, 12-16 and 20-22 stand rejected under 35 U.S.C. §102(b) as being clearly anticipated by U.S. Patent No. 4,151,736 to Quass. The Applicant respectfully traverses the 35 U.S.C. § 102(b) rejection of claims 1, 2, 7, 9, 10, 12-16, and 20-22.

In order for this rejection to stand, a single prior art reference must disclose each and every limitation of the claim sought to be rejected. 35 U.S.C. § 102(b).

Independent claim 1 and dependent claims 2, 7, 9, 10, and 12-16 which depend from claim 1, require "a tool package formed by said upper adaptor and said lower adaptor, wherein said tool package can be interchanged with a different tool package." See claim 1. The Applicant respectfully maintains that this limitation is not disclosed by Quass.

The Office Action argued that Quass discloses a quick change apparatus for heavy die sets comprising a lower adaptor (12), an upper adaptor (10), a tool package

(16, 18), a lower shoe detail (14), and an upper shoe detail which is not specifically identified with a reference character. Additionally, Quass discloses the die shoe or lower adaptor (12) having roller means (30) which are used to remove the die shoe (12) from the press. Quass does not disclose an interchangeable tool package formed by an upper adaptor and a lower adaptor. Further, Quass only discloses the bed or lower shoe detail (14) mounted to the die shoe (12). The bed (14) forms a top for which the die shoe (12) can roll across on the rollers (30).

By contrast, claims 1, 2, 7, 9, 10, and 12-16 require a tool package formed by the connection of the upper adaptor and lower adaptor, where the tool package can be interchanged with different tool packages. A lower shoe detail is configured to receive the lower adaptor, and an upper shoe detail is configured to receive the upper adaptor. In the rejected claims, the upper and lower shoe details do not form part of the tool package. Quass discloses the shoe details being part of what gets removed. Moreover, Quass apparently only discloses removing the lower shoe detail.

Further, the rejected claims require that the "lower shoe detail includes a lower die shoe forming a base for the lower shoe detail." See claim 1. Thus, the lower die shoe, as a portion of the lower shoe detail, is designed to accept the lower adaptor. This differs from Quass which discloses the bed (14) having tracks (32) for the rollers (30) of the die shoe (12) which is a separate component from the bed (14). Thus, the entire die shoe (12) is being removed from the press, rather than an adaptor that is connected to the die shoe.

Therefore, the Applicant respectfully submits that independent claim 1 and dependent claims 2, 7, 9, 10, and 12-16 define over the art cited by the Examiner. Thus, the Applicant respectfully requests withdrawal of the rejection.

In further regard to claim 7, the Applicant respectfully maintains that the claim requires an upper binder holder on the upper die shoe where the "upper binder holder has a centrally located aperture for receiving the upper adaptor plate." See claim 7. By contrast, Quass discloses a punch holder plate (10) which is connected to a guide means (24). However, Quass does not disclose that the guide means (24) has an aperture for receiving the plate (10), where the plate (10) is removed and replaced with different tooling. Therefore, the Applicant respectfully maintains that dependent claim 7 defines over the art cited by the Examiner, and respectfully requests withdrawal of the rejection.

In further regard to claims 13 and 15, these claims contain the limitation of "a rack and pinion mechanism that is integrated into the lower die shoe," (see claim 13) and lift mechanism being one of hydraulically and pneumatically operated (see claim 15). By contrast, Quass discloses a lift-disengageable piloting means (77) having four single-acting oil-hydraulic jacks (78) which are mounted to the bottom side of the bed (14) of the press. Therefore, the rack and pinion mechanism and the pneumatically operated lift mechanism disclosed in dependent claims 13 and 15, respectively, disclose different operating mechanisms. Thus, the Applicant respectfully requests withdrawal of the rejection of claims 13 and 15.

Independent claim 20 and dependent claims 21 and 22, which depend from claim 20, require "forming said first tool package ... wherein said first upper adaptor engages said first lower adaptor, disconnecting said first upper adaptor from said upper shoe detail ... and disconnecting said first lower adaptor from said lower shoe detail". See claim 20. This limitation is not disclosed by Quass.

The Office Action argues that Quass discloses a quick change apparatus for heavy die sets comprising a lower adaptor (12) and upper adaptor (10), a tool package (16, 18), a lower shoe detail (14), and an upper shoe detail which is not specifically identified with a reference character. Additionally, Quass discloses the die shoe or lower adaptor (12) having a roller means (30) which are used to remove the die shoe (12) from the press. Quass does not disclose an **interchangeable tool package formed by an upper adaptor and a lower adaptor**.

Claims 20-22 require a method of interchanging tool packages where the first tool package is formed from the first upper adaptor and first lower adaptor. When the first tool package is removed both the upper and lower adaptors are removed. Then a second tool package is inserted into the press, where a second lower adaptor is connected to the lower shoe detail and a second upper adaptor is connected to an upper shoe detail. Therefore, the present invention discloses a method for replacing both the lower adaptor and the upper adaptor in the press with a tool package formed by the upper and lower adaptor. For all the above reasons, the Applicant respectfully requests removal of the rejection as to claims 20-22.

Furthermore, the Applicant respectfully submits that Quass does not render claims 1, 2, 7, 9, 10, 12-16, and 20-22 obvious. The standard for obviousness is that there must be some suggestion, either in reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. The Office Action argued that Quass discloses a quick change apparatus for heavy die sets comprising a lower adaptor (12), an upper adaptor (10), a tool package (16,18), a lower shoe detail (14) and an upper shoe detail that is not directly indicated by a reference character.

Additionally, Quass discloses that the lower adaptor or die shoe (12) has rollers (30) which move across the lower shoe detail or bed (14) to remove the die shoe (12).

However, Quass fails to teach, suggest, or motivate one having ordinary skill in the art to form a tooling package having an upper adaptor and a lower adapter, where the upper adaptor is separated from an upper shoe detail and the lower adaptor is separated from a lower shoe detail (See claims 1 and 20). Further, Quass fails to teach, suggest, or motivate one having ordinary skill in the art to remove both the upper adaptor and the lower adaptor. Therefore, the Applicant respectfully submits that Quass does not render the present invention obvious.

Rejection of Claims 1-5, 7-10, 16-18, 20, and 22-24 Under 35 U.S.C. § 102(b)

Claims 1-5, 7-10, 16-18, 20, and 22-24 stand rejected under 35 U.S.C. §102(b) as being clearly anticipated by U.S. Patent No. 4,143,574 to Ryser, et al. The Applicant respectfully traverses the 35 U.S.C. §102(b) rejection of claims 1-5, 7-10, 16-18, 20, and 22-24.

In order for this rejection to stand, a single prior art reference must disclose each and every limitation of the claim sought to be rejected. 35 U.S.C. § 102(b).

Independent claim 1 and dependent claims 2-5, 7-10, and 16-17, which depend from claim 1 require "a tool package formed by said upper adaptor and said lower adaptor, wherein said tool package can be interchanged with a different tool package." See claim 1. The Applicant respectfully maintains that this limitation is not disclosed by Ryser.

The Office Action argued that Ryser discloses a stamping device comprising a lower adaptor (53), an upper adaptor (34), a tool package (43, 63), a lower shoe detail

(57, 22), an upper shoe detail (21, 31), and a lower binder holder (57). Additionally, Ryser discloses that a first unit consists of an upper die shoe (21), a lower die shoe (22), and guide posts (23). Ryser also discloses a second unit which contains a die support plate (31). Ryser discloses that the upper die shoe (10, 21) and the lower die shoe (11, 22) are separated and that the upper die shoe (10, 21) can be turned over so that the punch side can be removed and be replaced with a new tool. Col. 2, Lines 64-67. Also, a die plate (17) can be removed from the lower die shoe (11, 22) after the lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 67-68. Ryser does not disclose an interchangeable tool member, where only the adaptors are removed rather than the entire die shoe.

Ryser requires that both the upper die shoe (10, 21) and lower die shoe (11, 22) be removed in order to change the die plate (17); whereas, and the present invention allows for only the upper adaptor and lower adaptor to be removed from the press. Further, Ryser discloses that the die plates (17) are then removed after the die shoes (10, 21, 11, 22) are removed from the press. Col. 2, Lines 64-68. The present invention does not require this additional step once the adaptors are removed from the press.

By contrast, claims 1-5, 7-10, and 16-17 of the present application require an upper adaptor and a lower adaptor being connected to form a tool package which is removed from the press and replaced with a different tool package. A lower shoe detail has a lower die shoe which is capable of receiving the lower adaptor. Likewise, an upper shoe detail has an upper die shoe which is capable of receiving the upper adaptor. Thus, when changing the tool packages, only the upper adaptor and lower adaptor are removed from the press. Therefore, the Applicant respectfully submits that

claims 1-5, 7-10, and 16-17 define over the art cited by the Examiner. The Applicant respectfully requests withdrawal of the rejection of claims 1-5, 7-10, and 16-17.

In further regard to claim 17, the Office Action argued that Ryser discloses a collection pan on the bottom portion of the lower die aperture. The Office Action also references Figure 8 which shows a widened space between pin (64, 63'). Further Ryser discloses a fineblanking press which ejects the material from the press.

By contrast, claim 17 discloses a lower binder holder that "has one or more chutes that extend through the lower binder holder to a collection pan." See claim 17. Thus, the present invention differs from Ryser in that Ryser discloses that the sheered parts are ejected from the die plate through the ejector and cleared from the die area. Col. 4, Lines 43-45. The pins (64, 63') are used with the ejector (63) to perform the sheering function. Col. 4, Lines 15-29. This differs from the present invention, which collects a material in the press rather than ejecting it. Ryser does not disclose the chutes extending to a collection pan as stated in claim 17. Therefore, the Applicant respectfully submits that claim 17 defines over the art cited by the Examiner, and respectfully requests withdrawal of the rejection.

With regard to the Office Action's rejection of independent claim 18, claim 18 requires "a tool package formed by said upper adaptor and said lower adaptor ... wherein said tool package can be interchanged with a different tool package." See claim 18. This limitation is not disclosed by Ryser.

Ryser requires that both the upper die shoe (10, 21) and lower die shoe (11, 22) be removed; whereas, the present invention allows for only the upper adaptor and lower adaptor to be removed instead of the larger upper die shoe and lower die shoe. In addition, Ryser discloses that the die plates (17) are then removed after the die shoe

(10, 21, 11, 22) are removed from the press. The present invention does not require this additional step after the adaptors have been removed from the press. Furthermore, the present invention discloses the upper shoe detail having an upper binder holder with a centrally located aperture for receiving and holding the upper adaptor plate. Ryser does not disclose an upper binder holder on the upper shoe detail, Ryser only discloses a lower binder holder (57). Therefore, the Applicant respectfully submits that independent claim 18 defines over the art cited by the Examiner, and respectfully requests withdrawal of the rejection.

By contrast, independent claim 18 of the present application requires an upper adaptor and a lower adaptor being connected to form a tool package which is removed from the press and replaced with a different tool package. A lower shoe detail has a lower die shoe which is capable of receiving the lower adaptor. Likewise, an upper shoe detail has an upper die shoe which is capable of receiving the upper adaptor. Thus, when changing the tool packages, only the upper adaptor and lower adaptor are removed from the press. Further, independent claim 18 discloses an upper binder holder on the upper shoe detail, where the upper binder holder has a centrally located aperture for receiving and holding the upper adaptor plate.

With regard to the rejection of independent claim 20 and dependent claims 22-24, these claims require "forming said first tool package ... wherein said first upper adaptor engages said first lower adaptor, disconnecting said first upper adaptor from said upper shoe detail ... and disconnecting said first lower adaptor from said lower shoe detail". See claim 20. The Applicant respectfully maintains that this limitation is not disclosed by Ryser.

The Office Action argued that Ryser discloses a stamping device comprising a lower adaptor (53), an upper adaptor (34), a tool package (43, 63), a lower shoe detail (57, 22), an upper shoe detail (21, 31), and a lower binder holder (57). Additionally, Ryser further discloses that a first unit consists of an upper die shoe (21), a lower die shoe (22), and guide posts (23). Ryser also discloses a second unit which contains a die support plate (31). Ryser discloses that the upper die shoe (10, 21) and the lower die shoe (11, 22) are separated and that the upper die shoe (10, 21) can be turned over so that the punch side can be removed and be replaced with a new tool. Col. 2, Lines 64-67. Also, a die plate (17) can be removed from the lower die shoe (11, 22) after the lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 67-68. Ryser does not disclose an interchangeable tool member, where only the adaptors are removed rather than the entire die shoe.

By contrast, claims 20, and 22-24 require a method of interchanging tool packages where the first tool package is formed from the first upper adaptors and first lower adaptors. Thus, when the first tool package is removed, both the upper and lower adaptors are removed. A second tool package is then inserted into the press where the second tool package comprises a new lower adaptor and a new upper adaptor. The lower adaptor is then connected to the lower shoe detail and the upper adaptor is connected to the upper shoe detail. Ryser discloses that the upper die shoe (10, 21) and lower die shoe (11, 22) are removed and then the die plates (17) are changed from the die shoes (10, 21, 11, 22). Therefore, the Applicant respectfully submits that claims 20, and 22-24 define over the art cited by the Examiner, and the Applicant respectfully requests withdrawal of the rejection.

Furthermore, the Applicant respectfully submits that Ryser does not render claims 1-5, 7-10, 16-18, 20, and 22-24 obvious. The standard for obviousness is that there must be some suggestion, either in reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. The Office Action argued that Ryser discloses a stamping device comprising a lower adaptor (53), an upper adaptor (34), a tool package (43, 63), a lower shoe detail (57, 22), an upper shoe detail (21, 31), and a lower binder holder (57). Additionally, Ryser discloses that a first unit consists of an upper die shoe (21), a lower die shoe (22), and guide posts (23). Ryser also discloses a second unit which contains a die support plate (31). Ryser discloses that the upper die shoe (10, 21) and the lower die shoe (11, 22) are separated and that the upper die shoe (10, 21) can be turned over so that the punch side can be removed and be replaced with a new tool. Also a die plate (17) can be removed from the lower die shoe (11, 22) after the lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 64-68. Ryser fails to teach, suggest, or motivate one having ordinary skill in the art to remove only the upper adaptor and lower adaptor instead of the entire upper shoe detail (10, 21) and lower shoe detail (11, 22), and then removing the die plates (17). Therefore, the Applicant respectfully submits that Ryser would not render the present invention obvious.

Rejection of Claim 6 Under 35 U.S.C. § 103

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,143,574 to Ryser et al. The Applicant respectfully traverses the 35 U.S.C. § 103(a) rejection of claim 6.

The standard for obviousness is that there must be some suggestion, either in reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention.

Dependent claim 6 requires "a tool package formed by said upper adaptor and said lower adaptor, wherein said tool package can be interchanged with a different tool package." See claim 1 from which claim 6 depends. Additionally, claim 6 requires "one or more nitro cylinders dispersed along said upper surface of said lower die shoe" in order to "provide greater binder holding pressure." See claim 6. The Applicant respectfully maintains that these limitations are not disclosed by Ryser.

The Office Action argued that Ryser discloses the lower die shoe including a means for holding the binder 155, and that it would have been obvious for one having ordinary skill in the art to provide Ryser with nitro cylinders as a fastener device. Additionally, Ryser discloses that the upper die shoe (10, 21) and lower die shoe (11, 22) are removed from the press, then the upper die shoe (10, 21) can be turned over so that the punch side can be removed and replaced with a new tool. Col. 2, Lines 64-67. Also, a die plate (17) can be removed from the lower die shoe (11, 22) after the lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 67-68. Thus, the Applicant respectfully maintains that Ryser does not teach, suggest, or motivate one having ordinary skill in the art to remove only the lower adaptor and upper adaptor instead of the entire die shoe (10, 21, 11, 22) and then interchange the die plates (17) in combination with nitro cylinders creating greater binder pressure.

Therefore, the Applicant respectfully submits that claim 6 is not rendered obvious in light of Ryser. The Applicant respectfully requests withdrawal of the rejection.

Rejection of Claims 11 and 25 Under 35 U.S.C. § 102(b) and Alternatively Under 35

U.S.C. § 103

Claim 11 and 25 stand rejected under 35 U.S.C. § 102(b) and alternatively under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,143,574 to Ryser et al.

In order for this rejection to stand, a single prior art reference must disclose each and every limitation of the claim sought to be rejected. 35 U.S.C. §102(b).

The Office Action states that dependent claim 11 is anticipated by Ryser or in the alternative, rendered obvious by Ryder. Dependent claim 11 requires "a tool package formed by said upper adaptor and said lower adaptor, wherein said tool package can be interchanged with a different tool package." See claim 1 from which claim 11 depends. Additionally, claim 11 requires a first upper and lower binder holders with apertures, where a second upper and lower binder holders have different sized apertures. See claim 11. The Applicant respectfully maintains that these limitations are not disclosed by Ryser.

The Office Action argued that Ryser discloses a stamping device comprising a lower adaptor (53), an upper adaptor (34), a tool package (43, 63), a lower shoe detail (57, 22), an upper shoe detail (21, 31), and a lower binder holder (57). Additionally, Ryser discloses a first unit that consists of an upper die shoe (21), a lower die shoe (22), and guide posts (23). Also, Ryser discloses a second unit which contains a die support plate (31). Ryser discloses that the upper die shoe (10, 21) and the lower die shoe (11, 22) are separated and that the upper die shoe (10, 21) can be turned over so that the punch side can be removed and be replaced with a new tool. Col. 2, Lines 64-67. Also, a die plate (17) can be removed from the lower die shoe (11, 22) after the

lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 67-68. Ryser does not disclose an interchangeable member, where only the adaptors are removed rather than the entire die shoe.

By contrast, claim 11 requires a tool package formed by a lower adaptor and an upper adaptor wherein the tool package is interchanged with different tool packages. The present invention also has a lower shoe detail with a lower die shoe which is capable of receiving the lower adaptor. Likewise, the present invention has an upper shoe detail with an upper die shoe which is capable of receiving the upper adaptor. Claim 11 further requires an upper and lower binder holder having a different sized aperture or a second upper and lower binder holder. Therefore, the Applicant respectfully maintains that claim 11 is not anticipated by Ryser and respectfully requests withdrawal of the rejection.

Furthermore, the Applicant respectfully maintains that Ryser does not render claim 11 obvious. The standard for obviousness is that there must be some suggestion either in reference or in the relevant art, of how to modify what is disclosed to arrive at the claimed invention. Ryser discloses that the die shoes (10, 11) are removed from the press. Then the die shoes (10, 11) are turned over and the punch side unit can be removed. Col. 2, Lines 64-68. Thus, Ryser fails to teach, suggest, or motivate one having ordinary skill in the art to remove only the upper adaptor and lower adaptor instead of the entire upper shoe detail and lower shoe detail in combination with exchanging upper and lower binder holders with different sized apertures. Therefore, the Applicant respectfully submits that Ryser fails to teach, suggest, or motivate one having ordinary skill in the art the limitations required by claim 11, and the Applicant respectfully requests withdrawal of the rejection.

The Office Action states that dependent claim 25 is anticipated by Ryser, or in the alternative, rendered obvious by Ryser. Claim 25 requires "forming said first tool package ... wherein said first upper adaptor engages said first lower adaptor, disconnecting said first upper adaptor from said upper shoe detail ... and disconnecting said first lower adaptor from said lower shoe detail." See claim 20 from which claim 25 depends. Additionally, claim 25 requires the steps of providing a first upper and lower binder holders with apertures, and a second upper and lower binder holder with different size apertures. See claim 25.

The Office Action argued that Ryser discloses a stamping device comprising a lower adaptor (53), an upper adaptor (34), a tool package (43, 63), a lower shoe detail (57, 22), an upper shoe detail (21, 31), and a lower binder holder (57). Additionally, Ryser discloses a first unit that consists of an upper die shoe (21), a lower die shoe (22), and guide post (23). Also, Ryser discloses a second unit which contains a die support plate (31). Ryser discloses that the upper die shoe (10, 21) and the lower die shoe (11, 22) are separated and that the upper die shoe (10, 21) can be turned over so that the punch side can be removed and be replaced with a new tool. Col. 2, Lines 64-67. Also, a die plate (17) can be removed from the lower die shoe (11, 22) after the lower die shoe (11, 22) is separated from the upper die shoe (10, 21). Col. 2, Lines 67-68. Ryser does not disclose an interchangeable member, where only the adaptors are removed rather than the entire die shoe.

By contrast, claim 25 requires a method of interchanging tool packages in a die press adaptor system, wherein a first tool package is formed by connecting the lower adaptor and upper adaptor. Then the first tool package is removed from the press and a second tool package is inserted into the press. The second tool package has a lower

adaptor and an upper adaptor. Then the lower adaptor is connected to the lower shoe detail and the upper adaptor is connected to the upper shoe detail.

Ryser shows that the upper die shoe (10, 21) and lower die shoe (11, 22) are removed from the press. The method disclosed in claim 25 requires that only the upper adaptor and lower adaptor are removed from the press. Claim 25 further requires the step of providing a first upper and lower binder holder with different size apertures as a second upper and lower binder holder. Therefore, the Applicant respectfully maintains that claim 25 is not anticipated by Ryser, and the Applicant respectfully requests withdrawal of the rejection.

Furthermore, the Applicant respectfully maintains that Ryser does not render claim 25 obvious. Ryser discloses that the die shoe (10, 11) are removed from the press. Then the die shoes (10, 11) are turned over and the punch side unit can be removed. Col. 2, Lines 64-68. Thus, Ryser fails to teach, suggest, or motivate one having ordinary skill in the art to remove only the upper adaptor and lower adaptor instead of the entire upper shoe detail and lower shoe detail in combination with a first upper and lower binder holder having a different size aperture as a second upper and lower binder holder. Therefore, the Applicant respectfully requests withdrawal of the rejection.

Allowable Matter

The Applicant has added new independent claim 26 which includes the matter from original claim 18 and the allowable matter from claim 19. The Applicant thanks the Examiner for allowing this matter and respectfully requests allowance of new independent claim 26.

CONCLUSION


It is respectfully submitted that in view of the above amendments and remarks that claims 1-26, as presented, are patentably distinguishable because the cited patents, whether taken alone or in combination, do not anticipate or render obvious, the claims of the present invention. Therefore, Applicant submits that the pending claims are properly allowable, which allowance is respectfully requested.

The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 364-4300 if any unresolved matters remain.

Respectfully submitted,

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